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Group Art Unit Unknown

In re

Patent Application of

Phillip Wilson Howard

Application No. 10/598,482

Confirmation No.: 6002

Filed: August 31, 2006

Examiner: Unknown

“PYRROLOBENZODIAZEPINES”

INFORMATION DISCLOSURE STATEMENT  
PURSUANT TO 37 C.F.R. § 1.97(b)

Mail Stop Amendment  
Commissioner for Patents  
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Sir:

The Examiner's attention is directed to the references which are listed on the attached Form PTO/SB/08B; copies of non-U.S. patent references are attached.

Citation of these references is respectfully requested.

No concession is made that these documents are prior art, and Applicant expressly reserves the right to antedate the documents as may be appropriate.

Respectfully submitted,

  
Charlene L. Yager  
Reg. No. 48,887

File No. 065435-9081 US00  
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)				Application Number	10/598482
				Filing Date	August 31, 2006
				First Named Inventor	Phillip Wilson Howard
				Group Art Unit	Unknown
				Examiner Name	Unknown
Sheet	1	of	9	Attorney Docket Number	065435-9081 US00

**OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS**

Examiner Initials		Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc. ), date, pages(s), volume-issue numbers(s), publisher, city and/or country where published.
/BK/		ADAMS et al., "Molecular modelling of a sequence-specific DNA-binding agent based on the pyrrolo[2,1-c][1,4]benzodiazepines," <i>Pharm. Pharmacol. Commun.</i> (1999) 5:555-560
		ALTHIUS, T. H. and HESS, H. J., "Synthesis and Identification of the Major Metabolites of Prazosin Formed in Dog and Rat," <i>J. Medicinal Chem.</i> (1977) 20(1):146-148
		ARIMA et al., "Studies on Tomaymycin, a New Antibiotic. I. Isolation and Properties of Tomaymycin," <i>J. Antibiotics</i> (1972) 25:437-444
		BERRY, J. M. et al., "Solid-phase synthesis of DNA-interactive pyrrolo[2,1-c][1,4]benzodiazepines," <i>Tetrahedron Letters</i> (2000) 41:6171-6174
		BOSE et al., "New Approaches to Pyrrolo[2,1-c][1,4]benzodiazepines: Synthesis, DNA-binding and cytotoxicity of DC-81," <i>Tetrahedron</i> , 48, 751-758 (1992)
		BOSE, D.S. et al., "Rational Design of a Highly Efficient Irreversible DNA Interstrand Cross-Linking Agent Based on the Pyrrolobenzodiazepine Ring System," <i>J. Am. Chem. Soc.</i> , 114, 4939-4941 (1992)
		BOSE, D.S. et al., "Effect of linker length on DNA-binding affinity, cross-linking efficiency and cytotoxicity of C8 linked pyrrolobenzodiazepine dimers," <i>J. Chem. Soc. Chem. Commun.</i> (1992) 20:1518-1520
		CHEN, Z. et al., "A novel approach to the synthesis of cytotoxic C2-C3 unsaturated pyrrolo[2,1-c][1,4]benzodiazepines (PBDs) with conjugated acrylyl C2-substituents," <i>Biorg. Med. Chem. Lett.</i> (2004) 14:1547-1549
		COOPER, N. et al., "Synthesis of novel PBDs as anti-tumour agents," <i>Chem. Commun.</i> (2002) 16:1764-1765

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/BK/		COURTNEY, S. M. et al., "A new convenient procedure for the synthesis of pyrrolo[2,1-c][1,4]benzodiazepines", <i>Tetrahedron Letters</i> , vol. 34, No. 33, 5327-28 (1993)
		FARMER, J.D. et al., "DNA binding properties of a new class of linked anthramycin analogs," <i>Chemical Abstracts</i> , Abstract No. 239940r, vol. 114, No. 25, 25 899-903 (1991)
		FOLOPPE, M.P. et al., "DNA-binding properties of pyrrolo[2,1-c][1,4]benzodiazepine N10-C11 amidines," <i>Eur. J. Med. Chem.</i> , 31, 407-410 (1996)
		FUJISAWA PHARMACEUTICAL CO., LTD., Abstract No. 139983k, "Benzodiazepine derivatives", <i>Chemical Abstracts</i> , vol. 99, No. 17, 603 (1983)
		FUJISAWA PHARMACEUTICAL CO., LTD., Abstract No. 72145x, "Benzodiazepine derivatives", <i>Chemical Abstracts</i> , vol. 98, No. 9, 638 (1983)
		FUJISAWA PHARMACEUTICAL CO. LTD., "Benzodiazepine derivatives," <i>SciFinder Scholar</i> , 2-3 (2002)
		FUKUYAMA, T. et al., "Total Synthesis of (+)-Porothramycin B," <i>Tetrahedron Letters</i> , vol. 34, 16, 2577-2580 (1993)
		GREENE, T.W. and WUTS, P.G.M., <i>Protective Groups in Organic Synthesis</i> , John Wiley & Sons, 2 <sup>nd</sup> ed., Ch 7, 315-345 (1991)
		GREGSON, S. et al., "Synthesis of a novel C2/C2'-exo unsaturated pyrrolobenzodiazepine cross-linking agent with remarkable DNA binding affinity and cytotoxicity," <i>Chemical Communications</i> , 797-798 (1999)

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		GREGSON, S.J. et al., "Design, Synthesis and Evaluation of a Novel Pyrrolobenzodiazepine DNA-Interactive Agent with Highly Efficient Cross-Linking Ability and Potent Cytotoxicity", <i>J. Med. Chem.</i> , 44: 737-748 (2001)
		GREGSON, S.J. et al., "Effect of C2- <i>exo</i> Unsaturation on the Cytotoxicity and DNA-Binding Reactivity of Pyrrolo[2,1-c]1,4]benzodiazepines", <i>Bioorganic &amp; Medicinal Chemistry Letters</i> , 10: 1845-1847 (2000)
		GREGSON, S.J. et al., "Linker length modulates DNA cross-linking reactivity and cytotoxic potency of C8/C8' ether-linked C2- <i>exo</i> -unsaturated pyrrolo[2,1-c][1,4]benzodiazepine (PBD) dimers," <i>J. Med. Chem.</i> (2004) 1161-1174
		GREGSON, S.J. et al., "Synthesis of the first example of a C2-C3/C2'-C3'-endo unsaturated pyrrolo[2,1-c][1,4]benzodiazepine dimer," <i>Biorg. Med. Chem. Lett.</i> (2001) 11:2859-2862
		GREGSON, S.J. et al., "Synthesis of the first examples of A-C8/C-C2 amide-linked pyrrolo[2,1-c][1,4]benzodiazepine dimers," <i>Biorg. Med. Chem. Lett.</i> (2003) 13:2277-2280
		GUIOTTO, A. et al., "Synthesis of novel C7-aryl substituted pyrrolo[2,1-c][1,4]benzodiazepines (PBDs) via Pro-N10-troc protection and suzuki coupling," <i>Bioorganic &amp; Medicinal Chemistry Letters</i> , 8, No. 21, 3017-3018 (1998)
		HARA et al., "DC 102, a new glycosidic pyrrolo(1,4)benzodiazepine antibiotic produced by <i>streptomyces</i> sp.," <i>J. Antibiotics</i> , 41, 702-704 (1988)
		HARTLEY, J.A. et al., "An agarose gel method for the determination of DNA interstrand crosslinking applicable to the measurement of the rate of total and 'second arm' crosslink reactions," <i>Anal. Biochem.</i> (1991) 193:131-134

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/BK/		HOCHLOWSKI, J. et al., "Abbeymycin, a new anthramycin-type antibiotic produced by a streptomycete," <i>J. Antibiotics</i> , 40, 145-148 (1987)
		HURLEY, L. and NEEDHAM-VANDEVANTER, D., "Covalent Binding of Antitumor Antibiotics in the Minor Groove of DNA. Mechanism of Action of CC-1065 and the Pyrrolo(1,4)benzodiazepines," <i>Acc. Chem. Res.</i> , 19, 230-237 (1986)
		ITOH et al., "Sibanomicin, a new pyrrolo(1,4)benzodiazepine antitumor antibiotic produced by a <i>micromonospora</i> sp." <i>J. Antibiotics</i> , 41, 1281-1284 (1988)
		KAMAL, A., et al., "An Efficient Synthesis of Pyrrolo[2,1-c][1,4] Benzodiazepine Antibiotics via Reductive Cyclization," <i>Bioorg. Med. Chem. Ltrs</i> , 7, No. 14, 1825-1828 (1997)
		KAMAL, A., et al., "Synthesis of Pyrrolo [2,1-c][1,4]-Benzodiazepene Antibiotics: Oxidation of Cyclic Secondary Amine with TPAP", <i>Tetrahedron</i> , v. 53, No. 9, 3223-3230 (1997)
		KAMAL et al., "Synthesis and DNA-binding affinity of A-C8/C-C2 alkoxyamido-linked pyrrolo[2,1-c][1,4]benzodiazepine dimers" <i>Biorg. Med. Chem. Lett.</i> (2003) 13(22):3955-3958
		KAMAL, et al., "Synthesis of pyrrolo[2,1-c][1,4]benzodiazepines via reductive cyclization of w-azido carbonyl compounds by TMSI: an efficient preparation of antibiotic DC-81 and its dimers," <i>Biorg. Med. Chem. Lett.</i> (2000) 10:2311-2313
		KANEKO, T. et al., "Bicyclic and tricyclic analogues of anthramycin," <i>J. Med. Chem.</i> (1985) 28:388-392
		KANG, G.-D. et al., "Synthesis of a novel C2-aryl substituted 1,2-unsaturated pyrrolobenzodiazepine," <i>Chem. Commun.</i> (2003) 1688-1689

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/BK/		KOHN, K., "Anthramycin," <i>Antibiotics III</i> , Springer-Verlag, NY, 3-11 (1975)
		KONISHI, M. et al., "Chicamycin, a new antitumor antibiotic II. Structure determination of chicamycins A and B," <i>J. Antibiotics</i> , 37, 200-206 (1984)
		KUNIMOTO et al., "Mazethramycin, a new member of anthramycin group antibiotics," <i>J. Antibiotics</i> , 33, 665-667 (1980)
		LANGLEY, D.R. and THURSTON, D.E., "A versatile and efficient synthesis of carbinolamine-containing pyrrolo[1,4]benzodiazepines via the cyclization of N-92-aminobenzoyl)pyrrolidine-2-carboxaldehyde diethyl thioacetals: total synthesis of prothracarcin," <i>J. Org. Chem.</i> , 52, 91-97 (1987)
		LANGLOIS, N. et al., "Synthesis and cytotoxicity on sensitive and doxorubicin-resistant cell lines of new pyrrolo[2,1-c][1,4]benzodiazepines related to anthramycin," <i>J. Med. Chem.</i> (2001) 44:3754-3757
		LEBER, J.D. et al., "A revised structure for sibiromycin," <i>J. Am. Chem. Soc.</i> , 110, 2992-2993 (1988)
		LEIMGRUBER, W. et al., "Isolation and characterization of anthramycin, a new antitumor antibiotic," <i>J. Am. Chem. Soc.</i> , 87, 5791-5793 (1965)
		LEIMGRUBER, W. et al., "The structure of anthramycin," <i>J. Am. Chem. Soc.</i> , 87, 5793-5795 (1965)
		LEIMGRUBER, W. et al., "Total synthesis of anthramycin," <i>J. Am. Chem. Soc.</i> , 90, 5641-5643 (1968)

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/BK/		LOWN et al., "Molecular Mechanism of Binding of Pyrrolo(1,4)benzodiazepine antitumour agents to deoxyribonucleic acid – anthramycin and tomamycin," <i>Biochem. Pharmacol.</i> (1979), 28 (13), 2017-2026
		MORI, M. et al., "Total syntheses of prothracarcin and tomamycin by use of palladium catalyzed carbonylation," <i>Tetrahedron</i> (1986) 42(14):3793-3806
		MOUNTZOURIS, J.A. et al., "Comparison of a DSB-120 DNA interstrand cross-linked adduct with the corresponding bis-Tomamycin adduct," <i>J. Med. Chem.</i> (1994) 37:3132-3140
		NAGASAKA, T. and KOSEKI, Y., "Stereoselective Synthesis of Tilivalline," <i>Journal of Organic Chemistry</i> , vol. 63, No. 20, 6797-6801 (1998)
		NAGASAKA, T. et al., "Stereoselective Synthesis of Tilivalline," <i>Tetrahedron Letters</i> , 30:14, 1871-1872 (1989)
		O'NEIL, I.A., et al., "The Synthesis of Functionalized Pyrrolo-[2,1-c][1,4]-Benzodiazepines," <i>Synlett</i> , 75-78 (1997)
		O'NEIL, Chemical Abstract No. 171573p, "The synthesis of Functionalized Pyrrolo-[2,1-c][1,4]-Benzodiazepines", <i>Chemical Abstracts</i> , vol. 126, No. 13, 618 (1997)
		O'NEIL, I.A. et al., "DPPE: A Convenient Replacement for Triphenylphosphine in the Staudinger and Mitsunobu Reactions", <i>Tetrahedron Letters</i> , vol. 39, No. 42, 7787-7790 (1998)
		SAGNOU, M.J. et al., "Design and Synthesis of Novel Pyrrolobenzodiazepine (PDB) Prodrugs for ADEPT and GDEPT," <i>Bioorganic &amp; Medicinal Chemistry Letters</i> , 10, 2083-2086 (2000)

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		SMELLIE, M. et al., "Cellular pharmacology of novel C8-linked anthramycin-based sequence-selective DNA minor groove cross-linking agents," <i>Br. J. Cancer</i> (1994) 70:48-53
		SMELLIE, M. et al., "Sequence selective recognition of duplex DNA through covalent interstrand cross-linking," <i>Biochem.</i> (2003) 42:8232-8239
		SUGGS, J.W. et al., "Synthesis and structure of anthramycin analogs via hydride reduction of dilactams," <i>Tetrahedron Letters</i> , 26, No. 40, 4871-4874 (1985)
		TAKEUCHI, T. et al., "Neothramycins A and B, New Antitumor Antibiotics," <i>J. Antibiotics</i> , 29, 93-96 (1976)
		TERCEL, M. et al., "Unsymmetrical DNA cross-linking agents: combination of the CBI and PBD pharmacophores," <i>J. Med. Chem.</i> (2003) 46:2132-2151
		THURSTON, D.E. and THOMPSON, A.S., "The molecular recognition of DNA," <i>Chem. Brit.</i> , 26, 767-772 (1990)
		THURSTON, D.E. and BOSE, D.S., "Synthesis of DNA-Interactive Pyrrolo[2,1-c][1,4]benzodiazepines," <i>Chem. Rev.</i> , 94:433-465 (1994)
		THURSTON, D. E., "Advances in the study of Pyrrolo[2,1-c][1,4] benzodiazepine (PBD) Antitumour Antibiotics", <i>Molecular Aspects of Anticancer Drug-DNA Interaction</i> , Neidle, S. and Waring, M.J., Eds.; Macmillan Press Ltd, 1:54-88 (1993)

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		THURSTON, D.E. et al., "Synthesis of Sequence-selective C8-linked Pyrrolo [2,1-c][1,4] Benzodiazepine DNA Interstrand Cross-linking Agent," <i>J. Org. Chem.</i> , 61:8141-8147 (1996)
		THURSTON, D.E. et al., "Synthesis of a novel GC-specific covalent-binding DNA affinity-cleavage agent based on pyrrolobenzodiazepines (PBDs)," <i>Chemical Communications</i> , 563-565 (1996)
		THURSTON, D.E., "Nucleic acid targeting: therapeutic strategies for the 21st century," <i>Brit. J. Cancer</i> (1999) 80(1):65-85
		TIBERGHEN, A.C. et al., "Application of the stille coupling reaction to the synthesis of C2-substituted endo-exo unsaturated pyrrolo[2,1-c][1,4]benzodiazepines (PBDs)," <i>Biorg. Med. Chem. Lett.</i> (2004) 14:5041-5044
		TSUNAKAWA, M. et al., "Porothramycin, a new antibiotic of the anthramycin group: Production, isolation, structure and biological activity," <i>J. Antibiotics</i> , 41:1366-1373 (1988)
		UMEZAWA, H. et al., Chemical Abstract No. 4427a, "Mazethramycins" <i>Chemical Abstracts</i> , vol. 90, No. 1, 428 (1979)
		UMEZAWA, H. et al., "Mazethramycins," <i>SciFinder Scholar</i> , 2-3 (2002)
		WILLIAMS, M.A. et al., "Synthesis of conformationally constrained DTPA analogues. Incorporation of the ethylenediamine units as aminopyrrolidines," <i>J. Org. Chem.</i> (1994) 59(13):3616-3625

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				Application Number	10/598482
				Filing Date	August 31, 2006
				First Named Inventor	Phillip Wilson Howard
				Group Art Unit	Unknown
				Examiner Name	Unknown
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/BK/		WILSON, S.C. et al., "Design and Synthesis of a Novel Epoxide-Containing Pyrrolo[2,1-c][1,4]benzodiazepine (PBD) via a New Cyclization Procedure," <i>Tetrahedron Letters</i> , 36, No. 35, 6333-6336 (1995)
/BK/		WILSON, S.C. et al., "Design, Synthesis, and Evaluation of a Novel Sequence-Selective Epoxide-Containing DNA Cross-Linking Agent Based on the Pyrrolo[2,1-c][1,4]benzodiazepine System", <i>J. Med. Chem.</i> 42:4028-4041 (1999)

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